AN

Elenchus

OF

OPINIONS

Concerning the Cure

OF THE

SMALL POX.

Together with

Problematicall Queſtions

Concerning the Cure

OF THE

FRENCH PEST.

By T. WHITAKER Phyſician in Ordinary to His Majeſty and Houſe-hold.

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THE *EPISTLE* TO THE READER.

Candid Reader,

I Have been ſtudious to ſalute my Nation with ſome acceptable preſent. It is not as yet a complete year ſince my

Landing with His Majeſty *in* England, *and in this ſhort time have obſerved as ſtrange a difference in this ſubject of my preſent diſcourſe, as in the variety of opinions and diſpoſitions of this Nation, with whom I have diſcourſed. This diſeaſe of the* Small Pox, *was Antiently and generally in the common place of* Petit *and* Puerile *diſeaſes, and the Cure of no moment. The contagion that infected Rebellious Spirits, is known to come, and be received from the malicious breath of ſome venene Natures; and hath been permanent for many yeares, and conveyed to ſeverall parts of this Region (not extinct at this day.)*

day.) But from what preſent conſtitution of the ayre this childiſh diſeaſe hath received ſuch Peſtilential Tinctures I know not, yet I am ſure, that this diſeaſe, which hath for hundreds of yeares, and before the practiſe of medicine was ſo Exquiſite, hath been as commonly Cured as it hapned; therefore in this age not incurable, as upon my own practiſe I can teſtifie: therefore I have publickly indeavoured to caſt my weak dart at death, and to abate the ſeverity of this diſeaſe in thoſe that are afflicted with it. If I have not given full ſatisfaction to my Country either in the matter or manner of my preſenta-

tion, yet I have preſented my velle *and beſt reſpect unto them, with as much indeavour to fulfill their own deſire. And in effecting thus much, I have ſnatcht many houres from my ſleep and other employments, well knowing I was not born onely to ſerve my ſelf, nor can I be confident of much longer time to ſerve others. I am no ſooner paſt the diſeaſes of Youth, but in daily Expectation of the infirmities of Old Age. And thus Mankind is in* perpetuo fluere, *from the Cradle to the Saddle, and from thence to the grave; therefore I do put my ſelf upon action for the generall good of my Coun-*

try

try ſo long as I have time amongſt the Living, till I ſhall paſſe away and be ſeen no more. It is well known I have been buryed in Exile from my own Country the major part of three Lives, and by the ſame providence am raiſed and reſtored again; and by the ſame providence expect another Reſurrection, being aſſured that really I muſt enter into the Terreſtrial womb of my Mother before this Corruption ſhall put on Incorruption. This ſhort tract is my Will, In which I bequeath the All I have done at preſent, to thoſe that pleaſe to accept it, and wiſh there were more in my preſent poſſeſſion

to

to bequeath. And this Donation at this time, is wiſhed may be with as much reſpect received, as it is preſented from

A faithful Friend

and Country-man

T. WHITAKER.

AN *Elenchus of Opinions* In Curing of the SMALL POX.

THere are various Affects which beſiedge the body of man, and are continually ſtorming and laying battery to it; ſuch as are Luxury and intemperance in dyet and exerciſe; alſo the diſtemper of the ayre and popular infection, with many other cauſes, ſome from

Celeſtial influence without us, others from various firmentations within us; all ſubjecting humane bodies to depend upon remedies, and in theſe remedies either ſimple or compound, are contained the myſtery of healing, with the induſtry of the Phyſician, expertly and regularly to diſpence, and with judgment and experience ſpecifically to apply them: and this is the onely uſeful faculty of the Phyſician, producing all contemplation into act, not debaſing or undervaluing the Theorical part of Phyſick; which argueth *à priore*, from the cauſe to the effect, and as the Sun doth clearly diſcover the atoms, and occult myſteries of ſcience, and preſent them to publick view. For though an argument *à poſteriore*, from the effect to the cauſe, and from experience, be moſt

moſt ſenſible; yet when it receiveth a luſtre and illumination from reaſon, 'tis more ſatisfying becauſe more diſcourſive; (as for example) The Smith ſhall forge out a piece of Iron into ſeveral figures, and if he be demanded the reaſon why he doth firſt put it into an intenſe fire, he will anſwer you, becauſe his Maſter ever did ſo; but when he ſhall be informed that the ſubtile quality in fire doth open, ſegregate and ſoften the hardeſt body, which maketh it malleable, and ſo fitteth it for to receive the impreſſion of the hammer: this reaſon will adde a greater ſatisfaction to his ſenſe, as the complement and perfection of every Artiſt. And by this conjunction of Theory with Experience, I ſhall extract my ſubſequent Diſcourſe concerning the moſt proper remes

dies in the Small Pox.

There will never be wanting as many varieties of Opinions, as diſtinctions in complexions; but in no age ſo many ſeparatiſts in Arts and Sciences, as in this preſent age; nor any Region ſo inſane and ill-principled at preſent, as this Region of *England* hath lately been; our Uniiverſities for more than two Ages rather an *Amſterdam* of Opinators, then the learned ſchools of well-grounded Philoſophers; *O tempora! O mores!* My ſelf hath been ſo many years dead in exile, that in this my reſurrection I neither find the ſame places nor faces as I left them; as if the reſtleſs ſpirit of that mad *Vanhelmont* had ſet up his reſt in the ſpawn of this late production: The ſubject of this Diſcourſe is now diſputed, whether it be a Diſeaſe, or any

diſ-

diſpoſition præternatural? but I preſume this is but a gymnaſtick exerciſe, *argumentandi gratia*, toſſing each to other a few canting terms: for any well-inſtructed Phyſician will ſoon eſpye it to be a vitiation of the figure, and a diſeaſe Organical in general, ſuch as is the diſproportion of parts; and that it is a disfiguration is manifeſt to common ſenſe; therefore as a diſeaſe it is the ſubject of my following Diſcourſe.

This Diſeaſe, which the *Engliſh* nominate the *Small Pox*, is much queſtioned amongſt Authors, whether it were known to the Ancients or not; amongſt whom I find *Joannes Manardus*, famous for his excellent knowledge, to underſtand the Small Pox to be the ſame diſeaſe which *Galen* nameth *Exanthemata*, in *lib.* 5. *De*

morbis curandis, *cap.* 2. where he diſcourſeth of peſtilential Puſtules in the internal coat of the *aſpera arteria*, and ſuch as are in the external parts of the body, by no other appellation than *in nomine Exanthematum* : and the ſame Author in his Commentarie upon *Hippocrates* his Vulgar Diſeaſes, there doth affirm, that amongſt other diſeaſes in peſtilential conſtitutions, there doth appear *Ecthimata*, which are great flouriſhing puſtules in the skin, ariſing out of the ebullition of groſs humors, by which he doth apparently demonſtrate by what name the Small Pox, or *Variola*, paſſed amongſt the Ancients. And *Sebaſtianus de morbis puerorum*, with many other Writers, are of the ſame opinion ; from whom *Marcus Antonius*, the *Florentine* Phyſician, doth differ,

quæſt.

quæſt. 22. grounded upon the Authority of *Galen* 4 *de ſanitat. tuend.* ſaying, Where there is a complication of laſſitude with thoſe puſtules, which the *Grecian* nominateth *Exanthemata*, from thoſe we may ſoon diſcover the particular excrement, which cannot ſignifie the Small Pox, becauſe other puſtules do render the ſpecial excrement, with the ſame diſtinction of pure choller, burnt choller or phlegme, with their quality of ſaltneſs and ſharpneſs: therefore my endeavour muſt be to diſcourſe of that kind of Pox, which aſſaulteth humane bodies but once in the whole courſe of life, (except rarely.) *Valeriola*, whoſe memory is honourable, doth endeavour to prove the Small Pox or Meaſles which appear critically in inpeſtilential Fevers, not to be by *Galen* no-

minated *Exanthemata*, with whoſe opinion I do conſent, becauſe the appellation is of general extent to all kind of puſtules, and of chollers, as is verified in his book *De atra bile*, (where he affirmeth) in deceaſed perſons; where excretion by the lower belly is not ſufficient, in ſuch perſons the whole body is affected with puſtules, *quæ nigris exanthematis ſimiles eſſent, circum undique ſcatuit*; and in other places (he ſpeaketh) of white puſtules, (which *Pliny* nameth *papulas*) and of theſe *Cornelius Celſus* maketh more kinds of rough and ſharp eruptions upon the skin, *magis & minus* being the onely diſtinction of them: and many Moderns conceive theſe Pox to proceed from maternal menſtruoſity, others conceive them to be intercutaneal, ill juices or peccant humours, fer-

fermented by an intenſe heat in the ſuperficies of the skin which corrupt humours (according to *Fracaſtorius*) are generated by corrupt dyet, and therefore in his book *De morbis*, he placeth this diſeaſe of the Small Pox amongſt diſeaſes Epidemical; and as it is an affect cutaneal and epidemical, ſo it doth infect all children and young perſons, becauſe their temper is properly more moiſt and hot than old age, it being cold and dry in it ſelf, but excrementitiouſly moiſt, onely by the decay of natural heat, and altogether indiſpoſed to receive the impreſſion of it; old age being properly, *& per ſe*, cold and dry in temper, if otherwiſe, it is *mirandum in morbo*, and for ſuch wonders in diſeaſes I ſhall refer the Reader to *Skenkius* and *Petrus Foreſtus, &c.* There are

not wanting ſome Phyſicians, that are aſſertors of that opinion of the Small Pox, that it is hereditary to thoſe that are affected with it, and not to be avoided by their natural iſſue, let them be of any age or temper, and therefore no more to be admired than the Gout, Stone, Conſumption, with Paralytick and Hydropical diſeaſes, eſpecially and more generally the Small Pox: againſt whoſe Opinions *Fernelius* is evidently oppoſite, (eſpecially) to all Phyſitians that affirm the Small Pox to proceed from maternal menſtruoſity, but eſpecially cauſed by the malignity of the air, conjunct with vitious humours, whoſe opinion is moſt reaſonable, becauſe the Vehicle of univerſal infection is the ambient air, which apprehendeth ſuddenly all matters ſubject and diſpoſed

to

to receive contagion. Moreover, when the Small Pox are univerſally ſpreading, they frequently uſher in the grand Peſt, upon a ſtronger infection of the air: and that it is a malignity eſpecially of the air, hath been frequently proved by the creatures of the air, which have fallen dead to the earth, and killed by the poyſon of the air. Again, if this diſeaſe were conveyed in the principles of Nature, from maternal bloud, which is adminiſtred to the production of all animals, then there were an univerſal reception of this diſeaſe, not onely in humane nature, but alſo in all animals whoſe production is *ex ſemine & ſanguine*. But this diſeaſe is apprehended by no ſubject matter indiſpoſed to receive the impreſſion of ſuch venemoſity, as is of this nature; nor is all mankind capable

pable of ſuch reception, although *Riverius* will not have one of one thouſand of humane principles to eſcape it, yet in my conjecture there is not one of one thouſand in the Univerſe, that hath any knowledge or ſenſe of it, from their firſt ingreſs into the world, to their laſt egreſs out of this world; which could not be if it were ſo inherent a concomitant with maternal bloud and ſeed; but the Small Pox is dedicated to Infants more particularly, which are moſt moiſt, and ſome more than others, abounding with vitious humours, drawn from maternal extravagancy and corrupt dyet in the time of their geſtation; and by this aptitude are well diſpoſed to receive infection of the ayre upon the leaſt infection, according to *Epiphanius Ferdinandus, His cum quicquid*

quicquid recipitur, recipitur in ſubjectum benè diſpoſitum. Moreover, the want of motion is a ſtagmatizing cauſe in Infants, by which their beſt humours may be altered into putrefaction, and prepare that particular matter to a form fit for ſuch matter; for Infants have no other exerciſe to digeſt their nutriment, but crying (according to *Ariſtotle*;) and common obſervation will manifeſt, that the moſt quiet Infants are of leaſt duration, and moſt morbifical: the cauſes of the Small Pox (therefore) are upon the corrupt diſpoſition of the humorable maſſe internal, and theſe two cauſes do produce that one effect which *Galen* nominateth Obſtruction of all diſtribution internal, and Tranſpiration external, the permanency and continuation whereof doth effect

fect an ill habit, and conſequently all diſeaſes, both ſimilary, diſſimilary and common, and thus I proceed to the ſigns of this particular diſeaſe.

Although the ſigns by which this diſeaſe is ſignified and diſtinguiſhed from other affects, are many, which are rendred from the *Greeks*, *Arabians* and *Latines*, yet from none of them more exactly than *à Joanne Paſcalio medico Valentino*, in their order, the firſt ſign of them being a Pain of the back: the ſecond, Itching of the noſe: the third, Fearful and troubled ſleeps: the fourth, a compunction of the ſenſible and nervy parts of the body: the fifth, a Heavineſs or ponderoſity of the whole body: the ſixth, a flouriſhing colour in the face: the ſeventh is, the Lacrymation of the eyes: the eighth, a Burning heat

heat and fervency of the whole body: the nineth, a Gaping, yauning and ſtretching of the whole body: the tenth is, a Palpitation intercutaneal: the eleventh is, a Compreſſion and ſhortneſſe of breath: the twelveth, a Raucedo or hoarſneſs: the thirteenth is, a thick ſpitting from much heat: the fourteenth is, the heavineſs of the head: the fifteenth is, the trembling of the heart: the ſixteenth is, a great ſiccity or drouth and drineſs of the mouth and tongue: the ſeventeenth is, the perturbation of the mind, with Convulſive motion: the eighteenth is, the ſoreneſs of the throat: the nineteenth, the trembling of the hands and feet: the twentieth is, a perturbed and pale Urine. Theſe are the Pathognomical and proper ſigns of this diſeaſe in *fieri*

and

and in *facto*; the prognoſtick of hope or fear in the courſe and motion of this diſeaſe, depend-eth upon the mutation and alte-ration of theſe ſigns and ſymp-tomes, in the time and manner of their eruption conjunct with the colour of them as follow-eth.

The ſigns of diſcouragement after their eruption, taken from their colour, is when they ap-pear black or green, the black being worſt and moſt mortal. Again, they are more dange-rous when their eruption is ex-ceeding in quantity, than when they are but few in number; becauſe the impurity is ſooner corrected and exhauſted, and the ſpirits leſſe exerciſed in the expulſion of them; thoſe alſo are of more difficulty that are great and large, than the ſmall; according to *Ætius*, and a con-

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tradiction diametrical to *Avicen*, (who ſaith) the largeſt Pox are moſt void of danger; his words are theſe tranſlated, *ſcil. The white are beſt and ſafeſt when they are few in number and large in quantity.* Yet upon conſideration the difference may be reconciled between them without much litigation, if *Avicen* be underſtood in this ſenſe, That the greateſt in quantity are beſt in judgment, becauſe they educe with them from the centre to the circumference, a greater proportion of peccant humour, which is a great diſoneration or disburthening of Nature: and *Ælius* to judge the largeſt in quantity, to indicate a greater fulneſſe of the peccant cauſe, and more dangerous than the leaſt in quantity, becauſe the largeſt are ſignificants of redundancy in the cauſe: and herein they

they both agree, that the plenitude of matter is the cauſe of danger, becauſe not without more expence of ſpirit to be caſt out; but if the ſame internal redundancy of the cauſe be equal, then the larger eruption is the greateſt *levamen* to Nature. Beſides this redundancy there are many other concurrences of circumſtance, which are ſymptoms of as great danger in this diſeaſe, ſuch as are the ſtrictneſſe and looſeneſſe of the belly, for any ſpontaneous flux of the belly muſt be of an ill ſignification, though the cauſe be plenitude, and the evacuation be *à potentia naturæ*, becauſe it is a retraction of the matter in motion from the circumference to the centre, which manifeſteth (almoſt) an irrecoverable diſorder in natural motion, and very few upon ſuch

ſuch accidents do eſcape death: and Phyſicians cannot behold this accident of ſpontaneal purging or vomiting in this diſeaſe, without narrow hope; ſome rare eſcapes there hath been reported, of which I can be no witneſſe of any ſuch recovery. Thus having fulfilled my own intention in applying my ſelf to the meaneſt capacity, for obſervation and uſe of my own Country, which hath given me leave once more to breath in it, where I find this diſeaſe, heretofore of no moment, to be now of as great conſideration; therefore as hitherto I have plainly preſented to common view the cauſes both internall and externall, with the ſigns of it *in fieri & in facto*, I ſhall proceed according to my ingagement, to the reaſon of cure, and what remedies are moſt proper, and when

when to be uſed or applyed.

In the curing of this diſeaſe the principal ſcope of the Phyſician is to aſſiſt Nature in its regular motion, in the beginning with temperate correctives of the cauſe by dyet and ayre, the dyet according to *Paulus Ægineta*, muſt be moderate in quantity, neither too much, nor too ſparingly adhibited, nor too hot nor too cold in quality; if the dyet be too thin, the ſpirits will be enfeebled, and of no force or power to move the peccant cauſe to the circumference, which is the univerſal Emunctory of the body; and if the ayre of the place be over-hot, the feveriſh diſtemper is augmented, and the ſpirits in danger of ſuffocation: therefore upon this hinge of moderation turneth the ſafety of every perſon affected with this diſeaſe,

eaſe, and this courſe being ordered with judgment and care, is *inſtar omnium medicamentorum*, for there will be little uſe of any other application, except externally to preſerve the beauty and comlineſſe of the face: Yet according to my Theme I ſhall publiſh the variety of opinions in the curing of this diſeaſe, and after a little more enlargement of my own ſenſe, I ſhall leave my ſelf and all my Collations to the conſideration of our Engliſh world, as well knowing other Regions to differ as much from us in Practice as Language, and ſet a value upon their own cuſtom as will admit of no precept to the contrary, it appearing in a latitude to be an undervaluing of their own; nor can any man perſwade the major part of ſtrangers, but that they can ride any horſe in the world, with

with as much eaſe and confidence, as they do their owne Hobby-horſes and Aſſes, for in truth thoſe that they do ſo ride, are eſteemed by the beſt Caballariſt to be no other. But to inlarge my ſelf, or explain my ſenſe in the *regimen* of this diſeaſe, the whole work conſiſting in moderation of ayre and dyet, without any other mixtures of violence or bland impediments, which may altogether pervert, or in or by a leſſe force retard Nature in its motion, the motion of Nature in this caſe being from the beginning of this diſeaſe to the eruption of the Puſtules Critical, and in Critical motions the leaſt application of any medicament is ſo dangerous, that no expert Phyſician will admit: For Nature hath at this time ſet her ſelf in a Batalia poſture, to en-

encounter the enemy *vi & armis*; and if upon the charge it ſhall make diſcovery of aſſiſtance, it will retard the preſent encounter, which addeth courage to the enemy, and giveth him a greater choice of ground, but if any of theſe auxiliaries ſhould put Natnre into a diſorder by conjunction with it, the enemy will not neglect the opportunity of conqueſt: and in this argument a *Simile* may become this place, though it be not a perfect demonſtration, becauſe diſeaſes are as mutineers againſt natural government; & Nature, when it is it ſelf and without diſturbance, will give no entertainmeut to a reſiſting, rebellious and heterogeneall quality, to incorporate it ſelf into the moſt noble parts; but upon diſorder and diſturbance, then falſe appetites break in,

and

and open the gates to all hetero-geneality, to the ruine of the whole government; therefore when Nature is harmoniouſly ſet, the courſe is to preſerve it ſo, by winding up any ſtring at the firſt relax, which maintaineth harmony, and preſerveth that ſtring from contracting it ſelf by reſt, and grow ſo ſtubborn, that it cannot be wound up again without fear of ruption, which at the firſt ſlip might have been effected with much eaſe, and little fear of diſmembring the Inſtrument, and diſturbing the harmony; but if the relaxation by permanency hath over-ſtiffned and contracted this fiver of the Inſtrument, yet the muſician will not uſe any violent motion to extend it, and reduce it to its former poſture; but *gradatim* wind it up till it be properly ſited and har-

harmoniouſly fitted to conſent with the reſt of the members of the inſtrument; the ſame order is to be taken in the curing of this Diſeaſe; for although this affect by ſome malignity be exaſperated, yet the motion being critical will admit of no violence, and therefore a moderate dyet and temperate aire is only to be continued: the dyet being *alimentũ medicamentoſum*, ſuch as is milk with Saffron, with flowers of *Calendula* eſpecially, before the eruption of the Pox; there being neither art or reaſon violently to move crudities in the beginning of any Diſeaſe, without antecedent preparation, which preparation in this caſe is nothing elſe but the quiet of nature, and fomenting of it with ſeaſonable and moderate aliment, which is the beſt *refrigerium* or comfort to the ſpirits,

whoſe ſpiritual motion is the *unum neceſſarium* in this Diſeaſe. I am not ignorant of young conceptions in this point; nor is it my intention to neglect any objection that may be urged by my ſelf or any other Author, either ancient or modern, that may give more ſatisfaction to the Reader; who is (*quatenus medicus*) ignorant of ſeveral Sects of Phyſitians, as there are of Divines in Theology amongſt us; the *Eraſiſtrateans* will admit of no remedy in diſeaſes, eſpecially of plenitude, but faſting and abſtinence from dyet: *Hippocrates* commendeth a thin diet in the beginning of all acute diſtempers, and more plentiful in the declination. *Galen* in the beginning of all firmentation univerſally adviſeth Phlebotomy or bloud-letting, as a general evacuation of all humours

mours as they are mixt up in the maſſe of bloud, whoſe opinion wil be the baſis of all my future diſcouſe; there are many, and Phyſitians are *Galeniſts* in this point, and more eſpecially, and univerſally the French Nation which make bloud-letting the principal and ſole remedy in all Diſeaſes, Climes, Times, & Ages; and the greateſt argument to confirm this practiſe (is the mode of *France:*) by the ſame argument they would prove ſtinking and putrid fleſh, both of fiſh and fowl to be moſt comfortable to the ſenſe, and corroborative to the animal ſpirits; and if their Rhetorick be no better then their Logick to perſwade perſons of reaſon and ſenſe to accept of their mode, it is moſt probable it wil prove the *Nummiſmata* of *Galen*, which is a quære that will paſs no farther

whoſe ſpiritual motion is the *unum neceſſarium* in this Diſeaſe. I am not ignorant of young conceptions in this point; nor is it my intention to neglect any objection that may be urged by my ſelf or any other Author, either ancient or modern, that may give more ſatisfaction to the Reader; who is (*quatenus medicus*) ignorant of ſeveral Sects of Phyſitians, as there are of Divines in Theology amongſt us; the *Eraſiſtrateans* will admit of no remedy in diſeaſes, eſpecially of plenitude, but faſting and abſtinence from dyet: *Hippocrates* commendeth a thin diet in the beginning of all acute diſtempers, and more plentiful in the declination. *Galen* in the beginning of all firmentation univerſally adviſeth Phlebotomy or bloud-letting, as a general evacuation of all humours

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then their own Country, and thoſe that are ſatisfied with ſuch invalid arguments muſt ſuffer the ſucceſſe; for one errour in a logical brain being rooted, is without ſatisfaction; or extirpated with exceeding great difficulty.

Therefore I ſhall not hope to perſwade any of thoſe modiſh perſons from ſuch raſh practiſe, no more then to cleanſe the *Negro* of his blackneſſe. I call it raſh and inconſiderate practiſe in this Diſeaſe, becauſe it is a doubt indetermined amongſt the moſt Learned Profeſſors of all Nations, both *Greeks*, *Arabians*, and *Latins*, and all other principled from them; being all of them unreſolved of Phlebotomy in the ſmall Pox, upon any indication to be a ſafe remedy; and if the Diſeaſe be conjunct with an undeniable

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plethory of bloud, which is the proper indication of Phlebotomy; yet ſuch bleeding ought to be by ſcarification and cupping-glaſſes without the cutting of any major veſſel, becauſe the Section of ſuch veins do not only evacuate too much ſpirit, but alſo retract the peccant cauſe to the Centre which is intended to the circumference, and effected by a ſhallow ſcarification upon the arms, back and thighs; by which courſe there is a diminution of the cauſe in its mixture, and aſſiſtance to nature in its circumferential motion, with little expence of fixt or fluent ſpirit, which is a great ſupport to univerſal nature in its *conatus* to diſcharge the moſt noble parts from danger of ruine. Contrarily, in the behalf of bloud-letting, I have been urged much with the example of the now

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French King, who in this caſe was Phlebotomized about ten or eleven times (as I remember) my ſelf being at St. *Germain* the ſame time, and upon this example they will ground a precept for univerſal practiſe; I do not deny, but that ſuch rare eſcapes have been in all Diſeaſes; but for the univerſal and common ſucceſſe of ſuch practiſe, I ſhall leave to the obſervation and judgement of the Univerſe, regulating my ſelf according to reaſonable axioms which are eternal & of undeniable validity, if they be ſtudiouſly followed and ſeparated from phanatick ebulitions of an ill-principled brain: and if by this argumentation any perſon of an other ſenſe ſhall be offended, they do moſt honourably for themſelves to publiſh more certain, reaſonable and aſſured grounds

grounds of their practiſe, to the great ſatisfaction of the unſatiſfied vulgar; which can take no notice of any intervenient cauſe, but cenſure all practiſe according to ſucceſſe; it will alſo be a great inſtruction to others that are unacquainted with their myſtery or ſolid ground upon which they limited their Doctrine and practiſe, to the glory of their Nation wherein they were educated and born, otherwiſe it will become them to acquieſce in the Doctrine and practiſe of the moſt learned, antient and modern profeſſors of healing, and not like *Vanhelmont*, to blaſpheme all Univerſity and School-education and methodicall proceedings, contradicting all principles in Doctrine and practiſe, putting out all light, and leaving the world to grope in darkneſs without any ſpark

of light from them; if they be wiſe their lips preſerve it, for nothing proceedeth from them of any ſuch tincture, as if they did ſuppoſe we ought to know their meaning which the Devil doth not know, (nor themſelves their own according to vulgar apprehenſion:) for what can ſilence prove more, then a plain acknowledgment of ſuch an error as will not indure the light of reaſon, nor reduce any contrary diſputant to an *incommodum*, but leave a cenſure upon the art it ſelf, and all other that profeſſe it, as if art were onely a conjecture, and healing or curing of Diſeaſes were but an accident, as if cauſes had no relation to their effects, nor the ſublation of them artificially to any ſubſtantial predicament; which otherwiſe hath had an equall reputation of excellency in all Ages,

Ages, and the profeſſors thereof amongſt all Nations. Witneſs very many Kings which have eſteemed the contemplation and practiſe of medecine, as the one chief Jewel in their Crown, as hath been more largely expreſſed in my former writings. But to return from this digreſſion, I ſhall reſume my diſcourſe of Phlebotomy, and ſhew how unreſolved and unſetled a remedy it is in this Diſeaſe. All the chief profeſſors of medicine, eſtabliſh it upon the indications either of plenitude of humours or magnitude of Diſeaſes, theſe being moſt proper and univerſal indications of phlebotomy: and although it be a generall precept according to the Doctrine of *Galen*, yet it is not without exception, and more eſpecially excepted in this caſe of the ſmall Pox. Becauſe in this operation

a retraction of the peccant humour from the circumference to the Centre cannot be avoided, which remedy muſt be as dangerous as unreaſonable; becauſe no perſon of reaſon will allow a revulſion from an ignoble part to the moſt vitall and noble parts; and although plenitude of humours be an indication for evacuation, yet it doth not ſolely indicate phlebotomy, except it be a fulneſs and redundance of bloud in predominance, for impure plenitude is a contra-indicant of phlebotomy; the bloud offending more in quantity, then in quality, being the moſt proper indication of bloud-letting: and though there be ſome predominancy of bloud, yet bloud-letting in ſuch a caſe hath never proved a curative remedy, nor did I ever ſee a ſanguineous apoplexie cured

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by bloud-letting, and yet the indication of phlebotomy is proper, yet not curative, becauſe it is not *per ſe* the cauſe of the Diſeaſe, for where the cauſe is external as a confuſion in ſuch caſe, though there be a predominancy of bloud, yet bloud-letting doth prove a remedy of no moment. There is alſo an exception againſt phlebotomy; though there be an apparent magnitude of diſeaſe. As for example, there is *magnitudo morbi*, in a lucuphlegmatia or dropſie; ſo alſo in a *Cacexia*, and yet in theſe and ſuch like caſes phlebotomy can be no remedy, nor is it indicated from the magnitude of theſe Diſeaſes; in the Small Pox alſo, there is magnitude of diſeaſe, and though it be complicated with plethory of bloud, yet the cutting of a vein is not a proper or

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ſafe remedy eſpecially, from the beginning to their eruption, becauſe the motion of nature is critical: therefore thoſe that practiſe phlebotomy upon the precept of *Galen* without diſtinction of caſes, muſt conſequently incur the cenſure of inconſiderate and raſh practiſers, or ſuch as will abound in their own ſenſe which is non-ſenſe: and ſuch Phanaticks there are in medicine equall to thoſe in Theology, as doth appear by voluminous indigeſtions belched out in this Age, ſome of them meer ebullitions of bitterneſs, and others of hereſie, fomenting faction and mutiny in the Schools of learning, as much as in the Common-weal. Some ſuch Sectaries there are in Phyſick that deny phlebotomy to be a remedy in any caſe or diſeaſe, ſuch as are the off-ſpring of

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Vanhelmont, others that make it the ſole-remedy in all caſes, and their inſtructions are from the mode of *France*; which mode is of no Antiquity in that Nation, nor ever ſo commonly uſed by any of their Antient profeſſors, which do ordain it as it is in it ſelf, a great remedy, if properly adhibited, *viz.* where there is magnitude and violence of diſeaſe conjunct with plethory of bloud and conſiſting age, yet not without diſtinction of cauſes and diſeaſes with other circumſtances of time and clime. And thoſe that do read the moſt learned of that Nation can find them no otherwiſe principled: yet I have heard *Fernelius*, which I take to be a glory to that Nation, to have had a moſt ſad cenſure by ſome of *Pariſian* practiſers, and that it had been better for their Nation that he had been

been unborn. I have heard this language in diſcourſe, but could never conceive from what part of his learning they extracted their bitterneſſe. But to return to my Theme of phlebotomy in the Small Pox, in which caſe the agent ſtandeth onely like *Archimedes* in expectation of a place to fix his foot to diſlodge the earthen Globe, for untill ſuch an aſſurance of certainty to depend upon, doth manifeſt it ſelf, there will be no well-grounded aſſurance of curing this Diſeaſe by phlebotomy, not denying the practiſe upon juſt indications from the cauſe and diſeaſe rightly apprehended to be a moſt effectual remedy: but in this caſe although conjunct with plenitude of bloud, which doth moſt properly indicate evacuation, yet this evacuation by bloud-letting is inſufficient, be-

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cauſe according to *Galen* in his Books *de Multitudine, de Element. de Morbis vulgaribus* (ſaying) that bloud is moſt temperate, becauſe it is an equall mixture of all humours *ad juſtitiam*; and therefore Phlebotomy to be an equal evacuation of all humours conjunct with naturall ſpirits, and by this operation the bloud is left in its predominancy according to proportion, only the univerſall plenitude is equally leſſned: and the morbificall cauſe ſtill mixed with the remainder anſwerable both in quantity and quality to its firſt impreſſion upon the whole maſſe, ſo that the diſeaſe is not extinguiſhed by this remedy but leſſened in the cauſe. And although, according to this Doctrine of *Galen*, there is an equall evacuation of humours, yet the Spirits do at this orifice

unequally tranſpire, for in all bloud-letting there is a paſſe of fixed and innate ſpirit with the fluent, and theſe cannot come within the compaſſe of equality, becauſe the fluent ſpirit is daily repaired: but the fixed never: otherwiſe if it came within the compaſſe of repair, man ſhould be eternall upon this earth; but every evacuation of this nature doth abreviate humane life, and haſten old Age, as may be obſerved in the French Children, which by this frequent Phlebotomiſing are withered in *juvenile* Age. Therefore Phlebotomy is not a common remedy, but in ſuch extremity, as the perſon muſt loſe ſome part of his ſubſiſtance to ſave the whole.

Moreover in this univerſall evacuation there may be an expence of ſome humours which are

are neceſſary to be preſerved in the maſſe, becauſe they are not ſo ſuddainly repaired again, and from this cauſe nature may want a vehicle of motion, and ſuffer tyranny from the diſeaſe; as when the Phlegmatick part of humours is drawn from the cholerick, the bilious humor is left as fire to tyrannize over the remaining humours and the ſpirits, which are more apt to be inflamed, and for this reaſon an univerſall evacuation by Phlebotomy in the Small Pox is and muſt be a doubtful remedy, becauſe no man can juſtly prove that in a Phlebotick operation, he ſhall let out the predominant cauſe more or leſſe, or equall to any of the mixture in the maſſe of bloud. Therefore if the principal ſcope of the agent be to relieve nature offended and oppreſſed by the predominance

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and turgency of a ſingle peccant cauſe, the remedy indicated muſt be a particular correction, ſeparation and extinction of that particular predominance which is not to be effected by cutting a vein, becauſe the evacuation is univerſall and equally of the whole maſs of humours, leaving the predominant humour (according to proportion) as turbulent as before, and conſequently it can be no ſpecifical remedy in ſuch a caſe where the ſcope of cure is indicated from the quantity of the humour in predomination. And thus I paſs to the circumſtance of clime which doth prohibit Phlebotomy univerſally to be uſed in all Regions.

I am not ignorant of the Doctrine of *Galen*, nor of his precepts in this point of Phlebotomy, nor of *Augenius* his 17. Books

Books upon the ſame Subject; and although *Galen* in very many places affirmeth Phlebotomy to be an univerſal and equal evacuation of the mixt maſs of bloud, yet not granted without his own exception to be an univerſall remedy in all Diſeaſes, nor in all Regions: Therefore I ſhall now paſſe or urge his own exception againſt himſelf, which conſiſteth in the diſtinction of Regions and diverſities of climes, which as they are diſtinct in the degrees of aire, ſo alſo diſtinct in their dyet, which doth maintain nature in its *perpetuo fluere*; and as every Region hath a cuſtomary dyet, ſo is their cuſtomary or common aire moſt agreeable to the inhabitants as mud is to Eeles, and theſe are principally their ſubſiſtance, and much diſordered upon any alteration of their aire

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and dyet: and if this accident had not happned to *William Parr* (of our own Nation) his principles of nature might have lasted to this day unquenched: and it is a large vulgar errour to defend the death of any person to be just according to the power of his principles: nor could any person perswade Sir *Thomas More* upon the Scaffold, but if it had been the Kings pleasure he might have lived many more years upon the principles of nature; but these changes are accidental. But as every distinct Region hath their particular aire and dyet, so are the remedies or medicinall ingressions of their own clime most proper for their common and vulgar distempers, and those remedies will be more specifically *sanative* in that Region then any other *aliunde* or contracted from

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another clime: and out of a general obſervation *Galen* hath excepted againſt his general precept of Phlebotomy in his 9th. Book *de methodo medendi*, where he ſaith in the extraction of bloud, there are many ſcopes obſervable and to be conſidered by the Phyſitian, *viz.* cuſtom, ſtrength of ſpirit, conſiſting Age, with the temper of the Region and place of Habitation; as alſo the time of the year with the State of the Heavens: and by reaſon of theſe circumſtances, though bloud-letting be neceſſary, yet without a neceſſity of coaction not to be adhibited, and if there be ſuch a neceſſity, it is to be drawn ſparingly and with great conſideration as by theſe expreſſions of *Galen*, the whole univerſe may take cognizance, that as he eſteemeth Phlebotomy to be a grand reme-

remedy, ſo he adviſeth the uſe of it with as great circumſpection and judgement: and the non-eſtabliſhment of this remedy neither by the antient nor modern Profeſſors of healing, is the cauſe of ſo much difference in conſultation : every man imbracing his own commentary upon it, which maketh the remedy more doubtful ; otherwiſe it were (according to *Gantius* the *Portugal* Phyſitian) the moſt pleaſant and ſuddain remedy in all diſeaſes, for it is quickly done and with as little trouble and pain. And now I paſs to the circumſtances of time to be obſerved in this operation.

Riverius (I conceive) amongſt all the Moderns to be the greateſt aſſertor of Phlebotomy in *variolis & morbillis*, which are the Small Pox and Meaſles.

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And yet without the circumſtances of time, age, and plethory of bloud, he will not adhibit phlebotomy, nor upon redundance of bloud if there appear any ſign of their eruption; neither doth he admit of any inordinate ſleep, *Si puſtulæ erumpunt*, and for this reaſon *quia motus motui contrarius*, for ſleep doth colligate the ſenſe and retract the ſpirit and humors to the Centre; and for the ſame reaſon Phlebotomy is prohibited. And the ſame Author ſaith, thoſe that will begin the cure with bloud-letting, muſt be ſure that the foreſaid indications of Age and redundance of bloud be compleated. Moreover it is very rare to meet with ſuch a conjunction of indicants; plethory it ſelf according to the proper ſignification is a fulneſſe and redundance of the pureſt

reſt bloud, and ſuch a redundance as is *ad diſtentionem vaſorũ*, and very rarely diſcovered in Diſeaſes: & therfore the remedy doubtfull, and being uncertain it muſt be raſhneſſe or debility of intellect to apply ſuch remedy. The ſame Author ſaith alſo, that if the Phyſitian ſhall not be invited at the firſt ebullition, when this diſeaſe is in its firſt firmentation, and before there be any ſignification of eruption or very few in number and quantity, that at ſuch time Phlebotomy may be profitable; and in the next lines contradicteth himſelf diametrically, where he ſaith, upon the eruption of the Puſtules, the fervency and ſymptoms are abated: and the whole operation is left to the motion of nature, which is then propelling the cauſe to the skin from the centrall parts,

parts to the circumferential, and then Phlebotomy is unneceſſary and of no uſe. Again the ſame Author affirmeth, that if this puſtulous eruption be intenſe and conjunct with a difficulty of breathing, it is a ſign that nature is onerated or over-burthened; and therefore bloud-letting is to be ordained for diſoneration of nature, and enabling it to encounter the remainder; which is reaſonable, if ſuch a part of the onerating humour might ſolely & *per ſe* be extracted without the loſſe of ſpirit; for the ſupport of ſpirit is the principal ſcope of cure in this diſeaſe, which is no way effected by bloud-letting. Therefore this practiſe is inſignificant, otherwiſe the argument would be acceptable to all Logical perſons, and as inacceptable to the whole Sect of *Gale-*

niſts which affirm phlebotomy to be an equall evacuation of all humours with fixt and fluent ſpirits, which are the principal prohibition of this practiſe in this caſe. Otherwiſe upon an univerſal oneration, it were reaſonable disburthening of nature, and properly indicated, if ſeaſonably adminiſtred and upon a critical motion. But to conclude with the determination of this Author, he in one word ſaith, bloud-lettings in the Small Pox is not to be adhibited neither in the beginning of the ebulition, nor eruption of the puſtules; neither is any bloud to be drawn ſafely or without danger, inſomuch that neither *Riverius* nor any other Author can afford any certain aſſurance of the practiſe of phlebotomy in this diſeaſe, but rather theſe contradictory oppoſitions be-

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tween the moſt Learned Antients and Modern Profeſſors of higheſt judgement and obſervation, do prove this ſcope of cure by bloud-letting to be an unſafe and doubtfull remedy in the Small Pox; and therefore I thought it my duty to publiſh ſo much to my own Nation and in their own tongue, that they may be inſtructed and enabled to avoid the danger of unſafe or raſh proceeding in the curing of this diſeaſe: and if theſe expreſſions be inſignificant to any perſons of another ſenſe, I ſhall leave them as couragious and valiant adventurers, and wiſh their returns may be more ſucceſsful then of late they havebin.

I have now moſt plainly expreſſed my own ſenſe of bloud-letting in this diſeaſe of the Small Pox particularly; yet it will admit of a more generall

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extenſion to all circumferential motions in nature, for without diſpute the intention in all afflictions is to expell all peccant and peternaturall cauſes from the Centre to the univerſal emunctory, or to ſome particular place of reception, from a more noble to a leſs noble part, according to its power in reſiſting the cauſe: for if it cannot effect a univerſal evacuation circumferential, nor an extreme impulſion from the moſt noble to the moſt ignoble part, ſuch as is from head to foot, or from the breſt to the back; then it moveth obliquely to ſome emunctory which may obtain the term of a perfect diverſion to the next vicine part, or elſe to ſome neutral which hath a vicinity with both. As from the head to the Glandules of the throat, Glandules of the groyne

which

which are more remote, and ſo proveth neither a proper diverſion, nor proper revulſion.

And in theſe motions, phlebotomy may be indicated either for diverſion or revulſion, or univerſal evacuation; which in Art ought to precede a particular evacuation, by which remedy ſome internal oppilations or obſtructions *in via* may be removed, and Nature enabled more univerſally to free it ſelf of a congeſtion. But ſince I have not conſented to phlebotomy in the Small Pox, I am obliged to declare an undenyable *regimen* in this diſeaſe with conſiderable remedys, both external and internal to be applyed; and although phlebotomy be in the Catalogue of external remedies, yet ſo of no uſe in this caſe, by reaſon that it is as difficult in this diſeaſe to find a pro-

per indication to ſenſe, as a ſimple intemperies in a veletudinary perſon; that is, ſuch a diſeaſe as is without any other complication, ſuch a diſeaſe imaginary there may be, but not demonſtrative to ſenſe: But if any proper indication with a neceſſity of coaction for drawing of bloud, doth preſent it ſelf to the agent, then as I ſaid in my precedent diſcourſe, the application of cupping-glaſſes upon the ſhoulders, arms, and thighs with ſcarification, is the ſafeſt remedy; with this caution that the ſcarification be ſuperficiall and not deep, leſt they enter upon a vein or artery; and the evacuation be ſtopped with much difficulty and danger to the patient. And this application thus performed, nature is aſſiſted in its circumferentiall motion, if there be alſo a great

care

care and circumſpection in the contemperation of the ambient aire of the place, that it be not ſo hot as to ſuffocate the ſpirits, nor ſo cold as to repell the humour in motion to the Centre; or ſo congregate and condenſe the intrinſecall cauſes, that in *conatu naturæ*, or in the endeavour of nature to diſſolve and open, the poroſities be inflamed, and the diſeaſe augmented, or totally ſtop the eruption of the puſtules: and therefore to be adviſedly ordered there are other externall remedies which are to be uſed in the ſtate of this diſeaſe unto the declenſion for the prevention of Eſcars, and theſe remedies are commonly the complement of every experienced Nurſe. But I ſhall firſt acquaint the Reader with ſuch remedies as are ordained by Learned and antient

practitioners, viz. when the matter of the puſtules doth corrode and make a deep impreſſion in the face, *Senertus* appointeth a ſufficient quantity of Mallow roots to be boiled in the Urine of the Patient. Some other Phyſicians and old Nurſes have uſed an aſtringent waſh, which in my ſenſe is not to be andibited, becauſe it ſtoppeth, or is the cauſe of retention of the humor in the face, and fixeth the cicatrix. *Riverius* ordaineth pyle of ſweet Almonds new preſt to anoint the face, and as an Anodine to contemperate the acrimony of the humour, which in ſome perſons (as *aqua fortis*) hath penetrated the bone, according to the relation of *Gartius*. *Fernelius* applaudeth this ſubſequent oyntment; Take ſweet Almonds, white Lillies, of each one ounce, Capons greaſe three drams,

drams, the powder of the root of *pæonie*, *flower de lys*, *Lithargy* of Gold, of each halfe the ſcruple, *Sugar-candy* one ſcruple; mixe all theſe in a hot Morter and ſtraine them through a linnen cloath, and anoint the face morning and night; and after this anointing waſh the face with water diſtilled from Calves feet. *Gartius* out of his obſervation recommended his *unguentum citrinum* to be in curing the cicatrix a *probatum*; and my ſelf ſhall preſent the oyle of Eggs to be moſt incarnative and generating fleſh, which doth fill up thoſe cavities and prevent circatriſing (or vulgarly pittings the fleſh) not forgetting when they come to maturity to open them with a ſilver inſtrument, leaſt by the permanency of the puſtulate matter, there be a greater impreſſion

of the cicatrix. Some other Phyſicians (I know not upon what baſis) diſpute againſt this order of opening the puſtules when they come to maturity; and I find their reaſon for it as weak as their opinion, for they urge ſuch a diminution of naturall heat in letting out the puruleut matter upon full maturity, that nature is ſo debilitated, that it is diſabled to incarnate; and by want of this incarnation the cicatrix is more profound: but upõ conſideration of the opening of an Apoſtema when it is mature, it is a levamen to nature as much as the taking of the burthen from a Porter doth refreſh him, and doth prevent the tediofity of naturall induſtry in mellowing or rotting the Coat in which the matter is involved; and conſequently a proportionable corroborative to naturall

heat

heat and motion, and more eſpecially when they are ſupplyed with remedies that are mundificative and carnative, as is before directed in the oyle of Eggs. But becauſe I hate prolixity, I do paſſe over a multitude of other Medicaments, well knowing the vanity of being over-active when a leſs motion is more ſatisfactory, & *fruſtra fit per plura quod fieri poteſt per pauciora.*

And therefore out of my own experience and quotidian practiſe, I have recommended and preſented this ſhort direction of Government in this diſeaſe, to thoſe that pleaſe to accept of it as the moſt ſafe and ſucceſsful. There remaineth now only one conſideration in externall remedies, and then I ſhall conclude this brief diſcourſe of the Small Pox, not doubting

but

but to render as much ſatisfaction to thoſe that do perpend it, as is needful to be received from any publication upon the ſame ſubject. And ſo I return to the laſt external remedy in this diſeaſe; and this is from the firſt eruption unto the time of maturation, in which time there is great inquietude and itching, principally in the plants of the feet, where the skin is moſt callous, hard and thick. And in this time I obſerve *Riverius* above all other Authors to ordain the bathings of the hands and feet, by reaſon of the denſity of theſe parts, in ſome more denſe than in others, as in Smiths, Carpenters, and Foot-poſts, whoſe hands and feet are harder than perſons of a more tender and ſedentary Trade or Profeſſion. I cannot but acknowledge that humectation

tion and attenuation to mollifie thoſe parts is properly indicated ; but the mode of this application is obſervable, becauſe upon the opening of the poroſities by bathing, the ambient aire may obtaine the advantage of repelling the inquination of the morbifical matter from theſe ignoble and extreme parts to the more noble, by the ambient aire in the courſe of ſanguineous circulation, and hath proved fatall in ſuch as have rare and tender skins, as is proved by the bathing the Illuſtrious Princeſs Royal. Therefore I ſhall rather ordain aperient fomentations in their bed, to aſſiſt their eruption and move ſweat : and thus I conclude all external remedies.

As I have plainly and briefly expreſſed my ſenſe and practice concerning externall remedies

in

in this diſeaſe, I am now obliged to paſſe orderly to ſuch remedies as are internally to be adhibited; and according to my former method, I ſhall in the firſt place entertain you with the practiſe of the beſt Profeſſors and Authors in medicine from the beginning of this diſeaſe to the increment, from the increment to the ſtate, and from the ſtate to the declination; and then ſhall take boldneſs to enter my ſelf into their Society, with all ſubmiſſion to Seniority, in joyning my own Vote amongſt them. The firſt internal remedy, according to all Antient order, is the dyet in this diſeaſe, which by the order of *Paulus Ægineta*, muſt be moderate in quantity and temperate in quality: Such as is Almond-milk, or as temperate as the bloud ought to be in heat

and

and moiſture, and we call it *medicamentum alimentoſum.* As for other internal Medicaments they are corroborative, and ſuch as ſupport the ſpirits naturall in the expulſion of the peccant cauſe, or Cathartical, or ſuch as do purge and evacuate the humorall cauſe: but ſuch medicines whether the form of gliſter or any other form, are univerſally cenſured as a motion contrary to the intention and induſtry of nature, becauſe the quickneſs of ſuch motion overheateth the ſpirits, and leſſeneth them in their quantitative power to force the cauſe to circumferential poroſities, conſequently to the ruine of the patient. Who is there of any obſervation that hath not the ſad experience of purging gliſters in the increaſe of this diſeaſe, and upon their eruption more

eſpeci-

eſpecially pernitious, and in my opinion more mortall then bloud-letting ? it being the leaſt evill becauſe it doth more equally evaculate all humours, *ſine conatu naturæ*, and a leſſe impowering of the ſpirits, becauſe all purging Medicaments muſt be procured into act by the power of nature principally; & yet ſome patients have ſuperviv'd ſuch raſh practice, yet not to be received as abhoriſticall, nor logically proved, more then an accident to be a ſubſtance. But for the Ancient, and moſt Learned Moderns of all Ages, they are in this diſeaſe upon the ſcope of propeling Medicaments from the Centre to the circumference, or from the internal to the external skin; ſuch as are decoctions of figs, *Calendula* flowers, and Saffron, in their juſt proportion boyled in milk, and

all

all aſtringent Medicaments to be prohibited in the beginning of ebullition, becauſe their aſtringency is a *Remora* and delay to nature in propelling the peccant cauſe, except ſome ſupervenient flux of the belly ſhall urge it; but the precedent ordinance, I recommend as the ſafeſt from the beginning of this diſeaſe, to the declenſion, for healing, expelling, and nouriſhing. And let it be a note in the Margent that this diſeaſe is moſt ſafely cured by regular Government and little medicine, and in this Land or Nation of Engliſh, (to whom I appeal) the moſt ſucceſsful.

And we muſt not raſhly reject the Antient, national and ſucceſsful Government of our own Nation, ridiculouſly to periſh by the mode of another,

as

as much unknown to us, as we to them in Education, Humour, and Intellect; and as manifeſt a difference in all, as is in the originall of colours: and every Nation doth build upon their own baſis, and their own obſervations and experience, both natural and moral, which are the rule of their own Government and Commerce with ſtrangers, which rule is natural to them, and the oppoſition as diametricall contrary as black and white; and ſuch a paſs from one extreme to the other is equally unreaſonable, and ſuch haſty motion can prove but Phaetontical and inſucceſsful. The mode of ſtrange habits in apparell may be received according to appetite and fancy without perill of life; and artificers of ſeverall Regions muſt be moſt dexterous in their operation,

peration, and more compliant with the humour and fancy of the natives thereof; but the gift of healing is not equally diſpenſed in every Region: *Hippocrates* condemneth all the *Gnydian* Phyſicians as the worſt orderers of dyet in diſeaſes of that age; and a great diſtinction there is between Phyſicians of all Nations in their ſucceſſe: ſo that the gift of healing is not equally diſpenſed to all the Sons of Art and Learning, for I have known as Learned Profeſſors as are in the World; and the want of ſucceſs in their practiſe, hath cauſed ſome to relinquiſh their Profeſſion: therefore a diſpoſition naturall gaineth more in a ſhort time of Excellency, then any compulſion can effect. And this naturall difference in diſpoſitions is the proper ſubject of that gift of heal-

healing, the donor a free agent, the recipient a ſubject fitted to receive the full impreſſion without reſiſtance, either to ſcience or ſucceſs; and theſe are *Hippocrates* his Sons of the gods by whom he ſwore, and that (plurality of deity excepted) was an Oath not over-matched by any Chriſtian form of ſwearing; and his prayer at the Altar was a Sacrifice of the higheſt Antiquity.

Beſides this diſtinction, of Artiſts, eſpecially Phyſicians of whom there can be none ſo expert & ſatisfactory in his applications to a native of a different clime and cuſtome as the perſon who is born and Educated in the ſame place, and thoſe ingredients to their remedy which will not agree with the curioſity nor reaſon of a ſtrange Artiſt, ſhall prove by their cuſtom

ſtom to be a ſpecifical remedy to thoſe Natives in their own Region: as in *Holland*, their butter-milk and apples is their moſt cordial refreſhment in all diſeaſes, and in all thoſe places; and of more eſteem then any other remedy, and moſt preſcribed by their Native Phyſicians; and if you meet with the preſcript of a pickled-herring, with an order to prepare it, you have then a *Probatum* in all diſeaſes; for there is no full ſatisfaction given to any of that Nation, if theſe remedies be prohibited. And anſwerably there is a natural adherence in all Nations to their own cuſtom, *Suum cuique pulchrum*, the Crow conceiveth her own bird the faireſt, and ſo doth the *Negro*. And both man and beaſt, as they have an aliment proper to their own Nature, ſo naturally they

they elect their own Phyſick; the fowles that feed according to their kind upon corn, worms, and carrion, when they are diſeaſed will ſeek out ſtones to cool them, and other diſgorging remedies they find out, as the dog doth graſs: therefore *non omnia omnis fert tellus.* But of all terreſtrial inhabitants, the Engliſh do moſt diſtaſt the productions of their own Country in Nature and Education, which preſenteth an invitation to all Nations to ſupplant and impoveriſh the Natives and offſpring of our own Country, or elſe inforceth them to ſtamp a ſtrange name, eſpecially upon pieces of Art, to make them vendible, to the great incouragement of ſtrangers and impoveriſhing our own Nation: amongſt whom there may by encouragement be pickt out an

an equality to the whole Univerſe; the neglect whereof doth as much infeeble the perſons as the plants, without ſupport anſwerable to their capacity. I have lived a long time amongſt divers Nations, and according to my time have had as much converſation with all ſorts of people and profeſſions; and (without National indulgence) could not apprehend any excellency unmatchable in *England*, eſpecially, before theſe latter Rebellious Ages, which was the diſcouragement of all Artiſts, and ſuppreſſion of Arts and Sciences; and in policy fomented by all neighbouring-Nations for the univerſall advance of their profit, and reputation of their Nation: and by their Induſtry and our own rebellious ſpirits, the Gallantry, Honour, Education and Anti-

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ent renown of our own Country hath been ſepulted in oblivion. And now thoſe Sects of *Sadduces*, that would not entertain the faith of a reſurrection, are now forced with grief and ſhame to confeſſe it, and without doubt ſhall daily ſee this corruption to put on incorruption, and our Nation to return to their former principles more purified by this fiery try-all, and to re-erect the Antient Memory and Monuments of all the Antient Profeſſors of Arts, and Sciences ſo odious to the ſpawn of this laſt Age, ſome of which were then thankfull they had forgot the Lords Prayer; and others that had turned all the Schools of Antient Philoſophy into furnaces and luxurious houſes for ſweating intemperate perſons; and theſe are the off-ſpring of *Phaeton* driving on their

their fiery Chariot, till they have crackt their skulls with their own ſublimation of ſpirits, for ayre rarefied muſt find vent or force it. *Johannes Crato* is not to be condemned becauſe his Tutor Educated him in Chymiſtry, but to be highly applauded for his non-profeſſion of it upon the uncertainty in the operation, *quia totum opus conſtat in regimine ignis*, and as a Mathematician ought to be a King according to Proverb, becauſe of the expence his variety of inſtruments doth charge him with; ſo ought the operatour to have more money then Learing, to fit himſelf with a furnace for that equall heat which ſhall without diſpute ſeparate his Homogeneals from his Heterogeneals; without which Regiment of fire it cannot be effected. And this is the reaſon why

every pretender to excellency in Chymiſtry ſpendeth his whole induſtry in the figure of his furnace, and though he doth rejoyce and warm himſelf at his own external furnace, yet thoſe infiered ſpirits of minerals are to the ſpirits of animals and innate heat as overpowering,as the Sun is to all Culine fire which putteth it out; and ſo it hath proved to all operators which have been exact in their office; they have been buryed very young in it.And this was a great obſervation of *Crato*, that *Paracelſus* which proclaimed eternity to himſelf in this World, did not live above 45. years; nor the *Germane* Princeſs,uſed to thoſe medicall preparations. And himſelf as a *Galeniſt* boaſteth of living with three Emperours,and creating his own Grand-child Doctor

Doctor of the Chair: but all ſuch obſervations are out of date and ſuperannuated; nor can an old man perſwade children from playing with fire till they have burnt themſelves. But more clearly to ſignifie my own ſenſe in Chymical operations, I cannot but approve the employment out of curioſity, becauſe it is a great diſcovery of mixt bodies, and their mixture, which is a great pleaſure to ſenſe, but not as medicinal remedies to be acceptable or homogeneal to humane tempers: but the preparation of Vegetals without exception, exceeding uſefull in the compoſure of medicaments, becauſe they are prepared in the womb or furnace of the Earth by a perfect temper of fire, and need nothing but a ſeparation from their *terra damnata*; and their

tincture very uſeful. And as it is more pleaſure to the operator, ſo is it free from danger which cannot be avoided in working upon mineral and metalical bodies, as may be obſerved from Goldſmiths, the major part of them being enervated and paralytick before they are of any conſiderable age of conſiſtency; and had they not their remedy always at hand, they would be ſoon ruined and uſeleſs in the world. The ſame accidents happen to miners that work in the earth amongſt minerals and metals, who very often are ſuffocated or ſtrangled in the place. Theſe experiments being undenyable are arguments of ſufficient force and demonſtration to prove their non-agreement or conſent with humane principles; but for the advancement of Art and Sci-

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ence, adventures muſt be made and adventures rewarded with reſpect and applauſe. The Navigator maketh diſcovery by the light of the Sun in its full ſplendor: but he that ſearcheth into the bowels of the earth hath no immediate aſſiſtance from that planet, therefore their diſcovery is more obſcure, laborious and dangerous, and their reward ought to be more ample. And now I return to my proper ſubject, and briefly to the concluſion of this diſcourſe of the ſpecifical internal remedies in this diſeaſe of the Small Pox, about which there is much litigation and diſpute between the Ancient and Modern profeſſors of medicine, ſufficient to ſtuff up a Volume of paper: therefore I ſhall upon my own experience and ſucceſſe recommend to my Country the ſole uſe of Saffron

and Milk, as a *Probatum* in this puerile diſeaſe, and according to the cuſtom of our Engliſh Nation without alteration from the beginning to the declenſion of the diſeaſe, and for theſe reaſons, becauſe the milk is ſufficiently nutritive and healing, and the Saffron a cordial propellent of the cauſe in ebullition from the Centre to the circumference; and for a common drink in the place of *Ptyſan* to uſe a ſmall decoction of *Sulfur*, which moveth by ſweat to the univerſal emunctory of the skin, and dryeth up ſuperfluous moiſture, leſſeneth the quantity of matter, and giveth a *levamen* to the naturall ſpirits in their motion; and for this practiſe I muſt return my acknowledgment and reſpect to *Gartias* the *Portugal* Phyſician. *Amatus Lucitanus* with other Mo-

Moderns of the ſame ſenſe, preſcribeth for an ordinary drink in this diſeaſe, the decoction of barley with Sorrel, which cannot be ſo ſiguificant as the decoction of *Salſa*; becauſe their refrigeration conſtantly will debilitate natural heat, and by reaſon of ſuch a check the motion of nature is impedted; and therefore *Fernelius* affirmeth that hot diſeaſes are more unſafe in their cure then diſeaſes of cold; becauſe cold remedies are altogether uſed as a contrary remedy to heat, by which cold correction of preter-naturall heat, natural heat it ſelf is alſo extinguiſhed, for which cauſe the application of conſtant Apozems ought to be moderately hot and moiſt, there may be much more argumentation upon the point, but very little more I conceive *à proprio*, for it is not argumenta-

tion that cureth diſeaſes, but the ſeaſonable application of ſpecificall remedies; and he that will make more haſte then good ſpeed ſhall have little comfort in his undertakings, and much leſs if his remedy be improper; for it is the ſpecifical quantity of the remedy that cureth every diſeaſe; and cures according to *Sanctorius*, conſiſt not in plurali-ties of medicaments, but the property of them anſwerable to the diſeaſe; and this is the rea-ſon why an old woman doth often by her experience of an imperical medicament make a cure of ſome particular affect re-linquiſhed by Learned practi-ſers both in medicine and Chy-rurgery: neither are all diſeaſes cured by a contrary remedy, (though the rule of contrary be univerſal) becauſe it admitteth exception, as burning is ſooner cured

cured by the ſcorching heat of fire, then by any other cold remedy; ſo alſo a *ſingultus* is a convulſive motion: and cured by ſternation which is a like convulſive motion, ſo alſo a laſſitude by exerciſe is cured by the like exerciſe. Thirdly, a fever is a hot and dry diſtemper, but this diſtemper is cured by hot and dry remedies, *ergo* the diſeaſe is cured by its ſimile, for if a tertian or ardent fever be cured by *Rhabarb* and *Scammonie*, *&c.* which are hot & dry, then the remedies convein to the cauſe and not to the fever as a diſeaſe; and according to *Galen lib. 6. Epid.* one pain is cured by another. *Hippocrates lib. 2. Aph.* 46. the greater and moſt vehement pain obſcureth the leſs pain, *lib. 2. aphor.* 26. a fever ſupervening a convulſion is good, but not a convulſion

upon a fever in his 4th. Book *aphor.* 57. in a convulſion or diſtention of the nerves if a fever ſhall ſupervene; it abſolveth the diſeaſe in his 5. Book *aphor.* 21. ſo alſo is vomiting cured with vomiting, and purging with purging. Fourthly, a *Tetanus* is cured by pouring water upon the head, *lib.* 5. *aphor.* 25. but a return is from a cold cauſe, and cured by a cold remedy according to *Epiphanius*, *Ferdinandus* and *Avicen lib. fen.* 4. *cap.* 1. ſaith, that all diſeaſes are not to be cured by contraries, becauſe ſome are cured by dyet, as is expreſſed formerly in the Small Pox, others by their ſimile, as is before ſaid. Fifthly, thoſe diſeaſes are onely to be cured by contrary remedies that can obtain their contrary remedies, for many diſeaſes want their contrary remedy,

ſuch

ſuch as are diſeaſes *in via & numero.* Sixthly, an *apoplexia* ever endeth in a *Paralyſis*, which is, a reſolution of the nerves, with a deprivation of ſenſe and motion in the part. *Gal. lib.* 4. *de loc. affect.* So that one diſeaſe *quantum ad cauſam* is cured by the ſimile. In the 7th. place according to *Ariſt.* one contrary is corroborated by the other contrary being preſent; therefore cures cannot onely be effected by contraries. To conclude, curing ſometimes is effected by occult qualities, acting from the property of the whole ſubſtance, ſuch as are *Bezoarticks*; therefore not by contraries, nor is this laſt propoſition true in all thiugs, becauſe *Hipp. lib.* 5. *aphor.* 19. cold parts are alwaies to be warmed except in a flux of bloud, ſo that by this argumentation all diſ-

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eaſes are to be cured by their ſpecifical remedy, and not by the multiplication of ingredients In my ſenſe the leaſt variety of medicaments in this diſeaſe of the Small Pox, is moſt ſucceſsful; for various and often applications and mixture in remedies doth perturb náture as much, if not more then continual eating and drinking in a ſane body, and by irrecoverable vexation of the patient, doth fruſtrate the expectation of the agent. To conclude, what I have written is agreeable to Antient and Learned Authority, and no fanatick conception, to make the world believe that theſe truths were not eſtabliſhed before by Learned Profeſſors, though not ſo far extended to vulgar apprehenſion. I am none of that ſociety that diſpute againſt that old

axiome,

axiome, *quod nihil dictum quod non dictum prius*, nor hath it been hitherto my fortune to caſt any eye upon any Modern that had not his ante-delineation from ſome precedent, and deduced from a former illumination; but the addition to invention is common and frequent in every age, there are differences in Writers as much as in painters, but none did ever penſil a draught to life by a meer copy, nor can they do it without copy. So that the difference is in the aptitude of ſome above other to preſent the copy more lively, that only, that is the proceed of meer fancy, is to ſenſe nothing but confuſion and void of any ſignification; nor will appear in art any thing but a monſtroſity, and in ſcience ſome vulgar errors, ſome will have the Philoſophy of *Ducartus* to be a

new

new Philoſophy of his own coyning, but himſelf will not deny his illumination was from *Ariſtotle*. Dr. *Harvy* his circulation of bloud was by the Antients nominated a motion of bloud by the continuation of parts, of which none were ignorant, though not expert in diſſection of living bodies: ſo alſo is the *nova medicina* laboratory inſired by the antient luminaries, and bellowſed up by operators of ſeveral and different fancies, and theſe additions are ordinary to invention; and ſuch addition is but the extention of a firſt invention, as one that in his travel maketh a diſcovery of a land unknown before, cannot ſay that land was not in being before; and if by the exact travell of a ſecond perſon a larger diſcovery be made, this diſcovery is but an inlargement and

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extenſion of the firſt diſcovery, and ſo may be a ſucceſſion of diſcoveries *ad infinitum*, and ſo it is generally in all invention: as in medicine, the firſt invention of remedies was from experience deduced from obſervation; and upon further obſervation of more exacter intellects, the reaſon of ſuch applications, and the ſpecificall qualities of the remedy more exactly diſcovered, which is an addition to the firſt obſervation. Moreover, the motion of the bloud was by the continuation of parts, as veins and arteries, and no farther diſcovered, untill my moſt learned Predeceſſor by his exact obſervation demonſtrated the manner of its motion to be circular, which is a farther extenſion of the firſt obſervation. And thus one Artiſt differeth from the other in the

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invention about the firſt diſcovery, which was the originall copy and compaſs by which they ſteered. And thus I have ſteered this diſcourſe to a haven where my intention is to lodge my veſſel, and if the unlading prove profitable to my Countrey, let them take it at their own valuation.

FINIS.

QUESTIONS

PROBLEMATICAL

Concerning the

French PEST.

By *Tobias Whitaker* M. D.
Physician in Ordinary to the
King and his Houshold.

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Queſtions Problematical

Concerning the

FRENCH PEST, &c.

NAtural motion is from imperfection to perfection, and according to nature I do now move from the diſeaſe of children which is nominated the *Small Pox*, to the grand diſeaſe of man-kind, which is nominated the *French Peſt*. From whence they contracted it, is not now the queſtion, but other queſtions of more ſubtilty, are my pre-

preſent Subject of Diſcourſe as followeth.

Quest. I.

Why this French diſeaſe ſhould lodge in humane bodies for many years without ſignification or diſcovery, and then appear with its proper ſymptoms of malice and contagion.

Mercurialis affirmeth that the poyſon in a mad dog is ſo lodged for many years before it appeareth in act; but giveth no farther reaſon why it is ſo; which is my preſent undertaking. As for the reality of it that is obvious to ſenſe, and doth viſibly appear, and how it is for longer or ſhorter time ſo lodged, will be as apparent to ſenſe, as may be argued from the containing ſubject more or leſs, or in a longer or ſhorter time diſpoſed

diſpoſed to produce this occult quality into act, conjunct with activity of motion ſooner, or impotency of natural power which doth retard it, and lodgeth it for a longer time without any ſymptom of eruption, and the malice is more according to thequantity of matter impregnated with a virulent quality. And that it doth ſo lodge without impediment or hinderance to the naturall action of the perſon in whom it lodgeth, is manifeſt to ſenſe in the menſtruoſity of women, which caſt a venene-ſpot upon the ſpeigle or looking-glaſſe and yet in health, and *ſine actione læſa* in themſelves: and as it is a venemous quality in their bloud, ſo hath it lodged in them untill their time of puberty without any ſuch diſcovery. And ſo doth the French diſeaſe lodge in

the

the Spermatick matter of humane bodys ſome years before it appeareth, and for ſuch time without ſenſible offence to them: but the time of latency longer or ſhorter dependeth upon quality of the recipient matter in which it is contained, as the putrifying quality in thoſe that are ſubject to the Stone, which diſturbeth ſome tempers ſooner and ſtronger then others according to the quality of the matter in which it is involved: as is obſervable in all poyſons which work according to the capacity of the recipient matter more or leſſe diſpoſed to receive impreſſion. As in minerals, ſulphur will ſooner fire then amber, and in vegetals flax will ſooner be fired then wood; and though theſe be ſenſible, yet there are occult qualities in poyſon imperceptible in their mo-

motion, and yet ſenſible in their effects and productions, as may be urged from the ſpringing up of hearbs and graſs, which moveth imperceptibly; and yet that it doth move is ſenſibly diſcovered by its growth in a ſhort time, and would appear in perfection at the firſt reception of the form, were it not impedited and delayed by the indiſpoſition of the matter informed *à vi plaſtica*, and this is the reaſon of the latency of this diſeaſe ſo long time inviſible.

Quest. II.

Why this French Peſt ſhould be generated in men and women free from any venereal act or impure congreſſion.

That it may be ſo generated, and that it is ſo, common experience doth preſent to every eye;

eye; and the Ancients teſtifie, *viz. Galen de loc. affect.* 5. in theſe words tranſlated, affirmeth, that the retention of ſeed and ſuppreſſion of menſtrual courſes doth terminate in ſuch poyſon as will effect any diſeaſe according to the diſpoſition and temperament of the body, and make impreſſion upon other materials different in nature from animals, as before I have urged concerning women with their aſpect upon looking-glaſſes in the time of menſtruoſity; and at the ſame time pollute all herbs within the ſphere of activity or contact, and ſo obſervable amongſt the French people, that they will not permit any of the female Sex within the circuit of ſuch years of puberty to deſcend their Wine-cellars or approach their Vineyards: which upon obſervation hath been ſo de-

deſtructive to their Vintage, and upon any impure congreſſiõ with women at ſuch time, are received ſome mortall and incurable diſeaſes, as the leproſie, ſo odious a curſe to mankind: and the venereal congreſſion with women at ſuch time, was not only prohibited by the *Jewes*, but alſo the entrance into any bath with them; therefore if the bathing ſuch perſons be of neceſſity to effect their health, my order ſhould be for every ſuch ſingle perſon to have a freſh bath to themſelves and their own private uſe. And thus I have proved that this diſeaſe may be generated in a man out of his own impurity, and without any impure congreſſion or venereal act.

QUEST. III.

After what manner this Peſt is lodged ſo long time imperceptible.

This queſtion is not void of difficulty to reſolve, for if there were any oppoſition or repulſion from nature, then the venene quality upon ſuch oppoſition muſt neceſſarily beget ſuch a conflict as would appear ſenſible, or ſuch a ſuppreſſion as will very little differ from a total extinction of ſuch venene motion; therefore my anſwer is, that viſcoſity and tenacity of the humours in which the ſpirits are involved, and in which they move, or their extreme coldneſs, by which both ſpirits and humours are ſo congregated, as without the reflection of a hotter beam, they cannot effect any motion; or by neglect of timely remedies to diſcharge the maſs of bloud of ſuch malignity,

lignity; for diſeaſes not reſiſted in the beginning do inſinuate and enter into the ſubject matter inſenſibly, untill their eruption be inavoidable. Other cauſes may riſe from irregularity of dyet, or want of exerciſe to rarefie the ſpirits, attenuate the humours, and mundefie the maſſe of bloud; for the want of ſuch motion the bloud is contaminated, as is apparent in water-veſſelled up from the motion of ayre, without which motion all waters would be but an Ocean of putrefaction, to the ruine of all creatures upon the land as in the Sea. Moreover, the want of exerciſe doth incraſſate the humours, and include the malicious quality in ſuch manner, that it cannot ſo ſuddainly break out into act, but is covered like fiery embers under aſhes, which ſend forth neither light nor heat

till they be ſtirred up. And after this manner this diſeaſe is lodged in the ſubject matter impreceptibly, as is reported by *Belocatus*, that this French diſeaſe was lodged in certain noble perſons of *Verona* thirty years before any Pathognomical ſymptom did appear.

Quest. IV.

Why this diſeaſe doth apprehend ſome perſons moſt maliciouſly at the firſt cotion, and leave other perſons void of contagion, though very frequent in the act of Venery and of impure tempers, according to ſenſe moſt apt to receive the impreſſion of ſuch poyſon.

I have in my former diſcourſe expreſſed the differences of capacities, to receive the impreſſion of diſtinct poyſon ſooner or later, and in that diſcourſe the

the anſwer to the firſt part of this queſtion is included; that ſome tempers are like tinder infired and infected at the firſt ſtroke or alliſion of the ayre between two hard bodies, when ſuch ſparks will make no impreſſion upon ſtraw or flax, which in their own nature are very combuſtible; ſo alſo are the different conſtitutions of humane bodies, ſome ſhall be by this Peſt infected in the firſt act, when other perſons of corrupt mixture and in ſenſe moſt diſpoſed to receive inquination or pollution ſhall not be apprehended with this diſeaſe, though very frequent in impure congreſſion: for that there muſt be a more proper aptitude to receive this contagion in the firſt act by that proper temper ſo infected, then in the other which is a diſpoſition more ſenſibly

diſpoſed to receive ſuch contamination in a higher degree; and yet they are not ſo really diſpoſed as the firſt, which receiveth a ſenſible pollution. And this muſt be an occult quality more latent then patient in them, which will incorporate with any mixture, which is not generally obſervable in mixture; as for example, oyle will not incorporate with water, but will ſeparate each from other; and yet they are both humid bodies: and though not capable of incorporation together, yet capable of diſtinct impregnation either of ſaltneſſe or ſweetneſſe; but oyle will not receive theſe tinctures ſo ſuddainly nor completely as water; and therefore poyſons of the ſharpeſt quality are impedited and reſiſted in their corroſion by oyly ſubſtances. And this is the reaſon

ſon why ſome diſpoſitions receive pollution more fully and ſpeedily then others: but where there is an homogeneality and ſameneſſe in the matter of mixture, there will be a perfect incorporation, although they be ſpecifically diſtinct, as the mixture of wine and water in the plant, for there is in the juice of that plant both a vinoſe and aquoſe quality ſo mixt, that it is difficult to ſenſe to diſcover any diſtinction from ſameneſſe or perfect homogenealities; but where there is no diſpoſition capable to receive contagion it ſelf, yet it may prove a vehicle of conveyance to a ſubject that is diſpoſed. For many perſons that have been in Venereal and impure congreſſion with an infected perſon, though not infected themſelves; yet upon the firſt act ſhall conveigh it to

another perſon well-diſpoſed to receive the contamination, for *quicquid recipitur, recipitur ſecundum modum recipientis*; and is proved by daily obſervation, that Cats, Pigeons and other creatures that have commerce with houſes infected with the Peſt, are not infected themſelves with the plague, yet do conveigh it to other perſons diſpoſed to receive the impreſſion of ſuch contagion. And according to the obſervation of *Sanctorius*, the breath of a Cat in a room will affect a conſumptive diſpoſition, with difficulty of breathing and fainting ſweats; though the Cat be unſeen by the perſon affected; which he made the rule of diſcovery of a Conſumptive inclination in ſuch perſons as come within the ſphere of the forenamed creature. And although the

the diſpoſition of the ſubject be the principal cauſe of receiving the impreſſion of this French diſeaſe and production of it into act, yet not the onely cauſe, for the continuance or long-ſtay in venereal act, and over-heating themſelves with ſo long and laborious motion is the cauſe of infection in that act; which otherwiſe might be avoided, when theſe that Sparrow-like are not infected with many impure congreſſions; nor is any contamination ſo active as that which proceedeth from lively animals by the aſſociation of their intenſe heat; as for cold poyſon they are potentiall, and according to their potentiality more ſlow and dull in their motion and production of their effect.

QUEST. V.

What power this is which is nominated potential, and how it deduceth this venenoſity into act,

This term potential ought to be made clear to ſenſe, becauſe any cold poyſon potential cannot be active of it ſelf; nor can nature as an agent natural produce it into act, but rather a contemperation or commoderation. Nor is it agreeable with my reaſon, that nature ſhould produce poyſon into act; becauſe nature is moſt adverſe to poyſon, and poyſon a contrary oppoſite to nature, except *Epiphanius Ferdinandus* can perſwade me to the contrary, for he will have ſomething alimentable in all poyſon; and if there be not ſomething nutritive in all poyſon according to his

his ſenſe, there can be no part of poyſon, as poyſon, reduced into alimentable act by nature. Therefore it i probable, that although every part of poyſon is poyſon, and as poyſon oppoſite and contrary to nature, as it is ſimple poyſon, and cannot be alimentable, but as a mixt body; ſomething may be extracted that may be reducible into aliment, or the whole mixture ſo contemperated with an alimentable, may receive ſuch admiſſion into our natural principles as may impregnate as much as the recipient ſubject is capable to receive, and *gradatim* produced into an act of the ſame mixture from whence it was extracted according to the quality of the poyſon, totally hot or cold; yet *Galen* doth urge another cauſe of nature, its production of poyſon into act, which is

from

from the repugnancy of nature with poyſon, by which conteſtation poyſons are ſo rarefied, and by the repugnancy of nature made more ſubtile and forcible to enter the principles of nature, and by this power produce themſelves into act, and the principles of nature into ſuch compliance as is not much different from identity with themſelves: and upon ſuch forceable entrance, though it be poyſon *in tota ſubſtantia*, and void of any alimentable condition, yet it receiveth entertainment by nature without any ſenſible impediment to natural action; and then digeſted, and ſo altered by naturall heat as maketh it alimentable, and prepared for aſſimilation. And this reaſon is conſented unto by *Galen*, *lib.* 3. *de ſimplic. medic.* where he affirmeth cold poyſons to be attenu-

ted,

ted, made hot and changed by the power of natural heat, by which mutation and alteration I conceive a full change of its own property into another nature, otherwiſe it will ſooner or later return to its own natural body again, as Gold by the power and force of heat diſſolved, and ſeemingly mixed with other metals and mineral ſubſtances, its own property being unalterable by heat, doth ſeparate from all other mixture, and returneth to its own proper and naturall body; nor can I conceive how Gold by the force of any fire ſhould loſe any atome of it ſelf, except St. *Anthony* his fire, which effected his *aurum potabile*, which challengeth entrance amongſt vulgar errors.

Queſt.

QUEST. VI.

Why a woman not infected her ſelf, ſhould infect another perſon with this diſeaſe,

This node ſeemeth difficult to unwedge, as being contradictive to reaſon, that any thing ſhould give that to another which it hath not in it ſelf to give, or that any perſon ſhould receive that which is not in being; therefore it cannot be underſtood of a meer non-entity, which is neither in act nor in power, but of an occult quality *latens in maſſa ſanguinea*, without any ſenſible diſcovery, till a Maſculine agitation ſhall make it effectuall and viſible in thoſe that upon ſuch motion receive the contamination; and ſuch inquination or pollution is many times received from women who

who have no ſymptom of infection perceptible in themſelves; and therefore I conceive it to be their own proper venene temper contigent in them, as in Scorpions and Aſpes and ſuch other venemous creatures; or elſe contracted *aliunde*, and from venene aliment; the uſe whereof hath made it a naturall nouriſhment to themſelves and poyſon to others, as was obſerved by *Avicen* in that *Puella* that fed upon nothing but poyſons, and was nouriſhed with them as an aliment inoffenſive and very nutritive to her, ſo as in common view ſhe appeared to be of a moſt wholeſome conſtitution, and yet her breath poyſoned all other within the ſphere of it, and with whom ſhe had any commerce or converſation. Thus every man doth receive the infection

fection of this diſeaſe, that hath coition with a woman of ſuch venene temper, though not infected her ſelf; and this is the reaſon why ſome ſuch conſtituted women do abbreviate the lives of all men that have any congreſſion with them in Wedlock or otherwiſe, and this venene quality is alſo in many men, which infect all they comply with, except thoſe of their own venene temper, and ſuch tempers are moſt homogeneally matched together; and if I were a profeſſor of the Law, I ſhould judge any ſound and wholſome temper ſo conjoyned in Matrimony to ſuch a venene conſtituon, their Matrimony to be unlawful becauſe unnaturall. And Sir *Francis Bacon* in his *Utopia* doth very much agree with me in this opinion and judgement, where he admitteth of no Ma-

tri-

trimoniall conjunction without a ſtrict paternal and materna inqueſt concerning the temper of each perſon and homogeneality in nature, and the hereditary diſeaſes they are ſubject unto, as the Gout, Stone, and *French Peſt*; that their propagation may be ſound, ſtrong and comely for the ſtrength and duration of his new commonweal. And this may be the reaſon rather then the Religion of the *Haunder*, who maketh it lawful for the man and woman to make tryal each of other after they be undertrood for ſome time before they are joyned together in Matrimony, and if in that time they have cauſe of miſlike, they may abſtain from Marriage without any cenſure of impiety or breach of their Law, or imputation of diſhonour.

Queſt.

QUEST. VII.

Whether there be any defenſative againſt infection in the act of Venery with ſuch perſons as are maliciouſly infected with this diſeaſe.

There are not wanting, and other Mountebanks upon every Stage and Market-place to quack of various remedies of defence, and ſpecifical preparations they have extracted to this purpoſe; though my ſelf hath known many of them, and ſome Phyſicians that have forfeited their palat and noſes in this venereal combat, and proved their defenſatives to be more fabulous then effectual, becauſe neceſſarily in all coition there muſt be attrition of the genitals which heateth and forceth open all poroſities in the Members, and muſt of neceſſity give entrance

to

to any venenoſity of this diſeaſe which doth contaminate the ſpirits; and if they can prepare no condenſing remedy to ſhut up the poroſities in the genitals, then their defenſative is a meer aiery diſcourſe, void of demonſtration and appear a miſt caſt before the eyes of the ſpectators. For there is no ſuch condenſing medicine or remedy of any effect, becauſe the friction of the genitals will relax and open the poroſities of the parts, and the ſpirits muſt inavoidably receive the contamination of the diſeaſe in contempt of all oppoſition to the contrary. For this poyſon moveth diſtinctly from other poyſons received at the mouth into the body, for they deſcend into the ventricle, and are not ſo ſuddainly mixed with the ſpirits becauſe they are diſperſed and ſcattered amongſt

mongſt the Viſcera, and receive their contamination *gradatim*; but this contagion is conveighed to the ſpirits in the turn of an eye, and communicated to them by the neareſt conſent which is between the genitals, and moſt noble parts of the body. And theſe are the reaſons of my non-conſent to any defenſative againſt the pollution of an unclean women, and if any medicament be ordered of preſervation from this Peſt, they muſt be ſuch Antidotes as do cure it; and no remedy of cure more ſpecifick then *Guiacum*: and this remedy by daily experience we ſee will not do it, nor will any chymical medicament, though it doth ſeemingly cure the diſeaſe, yet it will not preſerve them from reinfection: and very many perſons that account themſelves cured at preſent, and take

take boldneſs to make another adventure, are infected again before their bodies are cleared of their former medicaments; and though I ſaid ſomething of curative remedies, let me not be underſtood of abſolute cure, for there is no ſuch Cure.

QUEST. VIII.

Why this French diſeaſe of it ſelf killeth no man.

'Tis doubtleſſe and without queſtion that many perſons of both Sexes do daily die with this diſeaſe upon them, becauſe it admitteth of no perfect cure in any that are infected; and if any perſon perſwade the contrary, I ſhall give them leave to comfort themſelves with a falſe delight and pleaſant dream: but that this *French Peſt* is not *Necant* in it ſelf, is the queſtion to be

be argued, to which I anſwer with *Galen, lib. de Maraſmo*, that the principle *conatus* of nature is to defend the heart, eſpecially from poyſon of any quality; and that it doth moſt ſtrenuouſly defend it from the contagion and poyſon of this diſeaſe. Another reaſon is becauſe this diſeaſe in it ſelf is void of a febrile diſtemper, and if any ſymptom of frebricitation doth appear, it is accidentall, and from the complication of ſome other cauſe. Thirdly, this diſeaſe is void of the difficulty of breathing, except in the higheſt extremity. Fourthly, in this diſeaſe the pulſe is never altered, neither are there any ſigns of it to be taken from the pulſe, and theſe are demonſtrative arguments to prove the heart to defend it ſelf powerfully from the malignity of this diſeaſe. And this

this defenſive power according to my opinion muſt principally depend upon the power of the vitall ſpirits, which are more robuſt then the natural ſpirits, as doth appear by their containing veſſels of each; for the arterie that containeth the vital ſpirits is double coated, elſe the ſpirits contained in them would make eruption through them becauſe of their inherent force; and the veines but ſingle coated becauſe their ſpirits in activity and ſtrength is ſo much leſſe then is the vital; and by the force of this vital ſpirit the heart is defended againſt the invaſion of this Peſt: and by this vitall ſpirit the heart defendeth it ſelf againſt the aſſault of choler, which is ſo great an enemy to it according to *Ariſt.* 4. *de part. animal.* And yet this queſtion is not cleared from the exception

of

of many Phyſicians, who reaſonably do affirm the generation of vital ſpirits to proceed from the naturall; and if the naturall ſpirits have received contamination, how ſhall the vitall ſpirits which are begotten of them be free from pollution? nor could it be otherwiſe, but from the purification they receive from the heart; after the ſame manner as Gold is ſeparated from droſſe and other aliene tincture; by the activity of fire, ſo alſo doth the heart by its cordial fire inherent in it ſelf, purge and cleanſe the natural ſpirits from all pollution, and the heart by its own power defendeth it ſelf from the contamination of this diſeaſe, which is the cauſe in chief why this diſeaſe of it ſelf doth not kill the perſon affected with it.

Queſt.

QUEST. IX.

Whether this diſeaſe be the proper diſeaſe of one particular Region.

That every Region hath diſeaſes inherent in themſelves, and not contracted *aliunde*, with remedies of their own more ſpecifical, then any contracted from alien and different Regions; and that there is as much difference as between clime and clime, or Eaſt and Weſt, &c. without doubt is the *fides Catholica* of all Nations; but what Region may be the proper womb of this *French*; *Peſt* is a preſent diſpute between the *French* and *Neopolitan* the one will have it the proper diſeaſe of the *Indians*, and the *French* will have it proper to the *Neopolitans*; but becauſe it hath

made ſo great impreſſion in *France*, moſt Modern Writers nominate it the *French* diſeaſe; ſo that they challenge the Right to it from Cuſtom and long preſcription, and I know no Nation challenge any of their priviledge; but as they have ſpread their tongue very far in *Europe* and other Continents; ſo this diſeaſe hath commerce with the generality of Nations and Religions, both *Mahumetan*, *Jew*, *Chriſtian* and *Heathen*. But ſome particular Regions may be after this manner affected from their vicious ayre and dyet, witneſſe thoſe painful botches of the *Arabians*, affirmed by *Galen* and *Avicen*, that they are generated from the Locuſts which they ſo greedily feed upon, as alſo in *Attica* the Gout from their delicacy in dyet, and frequent uſe of Venery. Inſo-

much,

much, that according to the dyet and ayre, ſeverall Regions have their particular diſeaſes. But the French diſeaſe proceedeth neither from the ayre of the place nor dyet, but from meer Venery and impure Congreſſion, and therefore it is an Univerſall diſeaſe more common in Venereal and hot Countries, where the Women are more ſalacious then in cold Regions; this Sex being in their temper more cold then men, by the heat of the Region are provoked and more hot in pleaſure; by which themſelves and others in conjunction with them are inflamed, inſomuch that in thoſe places this French diſeaſe proveth Hereditary, and is conveyed from Family to Family in the principles of nature; as is the *Small Pox* accor-

ding to ſome opinions convey-ed in maternall menſtruoſity. And thus I have concluded the diſcourſe of both *Great* and *Small* according to my pro-miſe.

FINIS.